

said hybridization reaction being performed between the primers fixedly spotted on the substrate and said PCR-amplified base sequences; and

detecting at least one of the spots on said substrate in which the hybridization reaction occurs,

wherein said step of detecting the spots on said substrate in which the hybridization reaction occurs includes the steps of:

processing a fluorescent material to enter in said PCR-amplified base sequences which are double-stranded DNAs; and

detecting fluorescence generated by exciting said fluorescent material contained in said at least one of the spots on the substrate.

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